

Abstract of the Disclosure

A method of forming a scribe line having a sharp snap line entails directing a UV laser beam along a ceramic substrate such that a portion of the thickness of the ceramic substrate is removed. The UV laser beam forms a scribe line in the ceramic substrate in the absence of appreciable ceramic substrate melting so that a clearly defined snap line forms a region of high stress concentration extending into the thickness of the ceramic substrate. Consequently, multiple depthwise fractures propagate into the thickness of the ceramic substrate in the region of high stress concentration in response to a breakage force applied to either side of the scribe line to effect clean breakage of the ceramic substrate into separate circuit components. The formation of this region facilitates higher precision breakage of the ceramic substrate while maintaining the integrity of the interior structure of each component during and after application of the breakage force.